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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/388,123	08/31/1999	ISAAC SAIAS	9392-0011-99	3415

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WASHINGTON, DC 20006

EXAMINER

BRODA, SAMUEL

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 07/16/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/388,123

Applicant(s)

SAIAS, ISAAC

Examiner

Samuel Broda

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,14-17,22,23,25,26,29,30 and 32-40 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

- 6) ☒ Claim(s) 1,14-17,22,23,25,26,29,30,32,34 and 37-40 is/are rejected.

- 7) ☒ Claim(s) 33,35 and 36 is/are objected to.

- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 May 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

1. This communication is in response to Applicant's Amendment dated 1 May 2003.

Claims 1, 14-16, 25-26, 29-30, and 32-33 were amended; claims 2-13, 18-21, 24, 27-28, and 31 were canceled; claims 34-40 were added. Claims 1, 14-17, 22-23, 25-26, 29-30, and 32-40 are pending.

[NOTE: the Amendment satisfies the revised 37 C.F.R. 1.121 practice although at page 4 claims 31 and 32 were submitted in reversed order.]

### ***Drawings***

2. Applicant's formal drawings submitted with the Amendment have been reviewed and approved by the PTO Draftsperson.

### ***Claim Rejections - 35 U.S.C. § 112, First Paragraph***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3.1 Claims 14, 16-17, 23, 26, 32, and 40 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a

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way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

3.2 Regarding independent claim 14, this claim was amended to include repeating the eigenvalue calculation and then “detecting the emergent group of related sites as a group of related sites with temporarily increasing relatedness, wherein relatedness depends on the authority values and the hub values.”

However, the neither the text nor the drawings of the Specification appear to teach repetition of the eigenvalue calculations to discern “temporarily increasing relatedness.” The closest possible reference in the Specification appears at page 8 lines 20-22 stating:

The present invention further includes “time series” analysis tools, where **the time series does not track the evolution of scalar values**. Instead, the time series tracks the evolution of Web-topological communities.

(Emphasis added.)

Since the calculated eigenvalues would form a set of scalar values, it is unclear how this statement in the Specification could indicate that Applicant possessed the method of claim 14.

3.3 Claims 16-17, 23, 26, 32, and 40 are dependent on claim 14 and are rejected using the analysis of claim 14 above.

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*Claim Rejections - 35 U.S.C. § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the date of invention thereof by the applicant for patent.

4.1 Claims 1, 15, 22, 25, 29, 30, 34, and 37-39 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Kleinberg, “Authoritative Sources in a Hyperlinked Environment” (prior art submitted by Applicant).

4.2 Regarding claims 1, 15, 22, 25, 29, 30, 34, and 37-39, these amended claims correspond to the method of detecting multiple communities taught by Kleinberg. See pages 675-676 Section “Multiple Communities” wherein Kleinberg states at page 675 column 1 paragraph 7:

The non-principal eigenvectors of the matrices  $A^T A$  and  $AA^T$  provide us with a natural way to extract multiple communities of hubs and authorities from the base set  $T$ . . . .

Additionally, Applicant states in the Specification at page 4 lines 21-24:

. . . Most of the techniques developed in Kleinberg and Gibson are concerned with the analysis of static structures. **In contrast, the present invention extends techniques to linked data-structures that change with time.**

(Emphasis added.)

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None of claims 1, 15, 22, 25, 29, 30, 34, and 37-39 include subject matter regarding time-varying data structures.

***Allowable Subject Matter***

5. Claims 33 and 35-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Applicant's Arguments***

6. Applicant argues in the Amendment at pages 7-10 that the Specification enables the selection of parameters such as:

1. the choice of the value of the integer “n” used to calculate the n-th eigenvector of the matrices that leads to an accurate result; and
2. the value of the “minimum connectivity threshold” used to determine the emergent group.

***Examiner's Reply***

7. In response to Applicant's claim amendments, the Examiner has removed the previous Section 112 rejection. This rejection was not removed based on Applicant's arguments;

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Applicant's claim amendments canceled the limitations directed to the determination of the value of "n" and the minimum connectivity threshold.

*Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

10. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samuel Broda, whose telephone number is (703) 305-1026. The Examiner can normally be reached on Mondays through Fridays from 8:00 AM – 4:30 PM.

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If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Kevin Teska, can be reached at (703) 305-9704. The fax phone numbers for this group are:

(703) 746-7238 --- for communications after a Final Rejection has been made;

(703) 746-7239 --- for other official communications; and

(703) 746-7240 --- for non-official or draft communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist, whose telephone number is (703) 305-3900.



**SAMUEL BRODA, ESQ.  
PRIMARY EXAMINER**